

Abstract**ACTIVE MATRIX ARRAY DEVICES**

5 An active matrix array device, such as an AMLCD, has an array
of matrix elements (10) addressed via sets of address conductors (14, 16). An
address circuit (35) connected to one set (16) comprises a multiplexing circuit
10 (31) integrated on the same substrate (25) as the matrix elements which has a
plurality of signal bus lines (33), the one set of address conductors being
organised in groups with each conductor in a group being associated with a
respective and different signal bus line and the groups being addressed in
sequence. Each signal bus line is connected to a respective signal processing
15 circuit (42), e.g. a D/A converter or sample and hold circuit in the case of an
AMLCD, which is also integrated on the substrate. To avoid problems in use
due to the manner of fabrication of these circuits and the operation of the
multiplexing circuit, the address circuit is arranged so that the individual signal
processing circuits associated with adjacent column conductors are located
close together on the substrate.

20 Figure 4.